

**DEFENSE THREAT REDUCTION AGENCY**



*Making the World Safer*

*Contamination Avoidance at Seaports of  
Debarcation (CASPOD)  
Advanced Concept Technology Demonstration  
(ACTD)*

*CASPOD Overview Briefing*



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*DTRA/CB*  
*CASPOD Technical Manager*

# *Purpose*

Provide information on program status and technical approach  
to the CASPOD ACTD



*“The gravest danger to freedom lies at the crossroads of radicalism and technology.*

*When the spread of chemical and biological and nuclear weapons,  
along with ballistic missile technology—when that occurs, even weak states  
and small groups could attain a catastrophic power to strike great nations.  
Our enemies have declared this very intention, and have been caught seeking  
these terrible weapons. They want the capability to blackmail us, or to harm us,  
or to harm our friends—and we will oppose them with all our power.”*

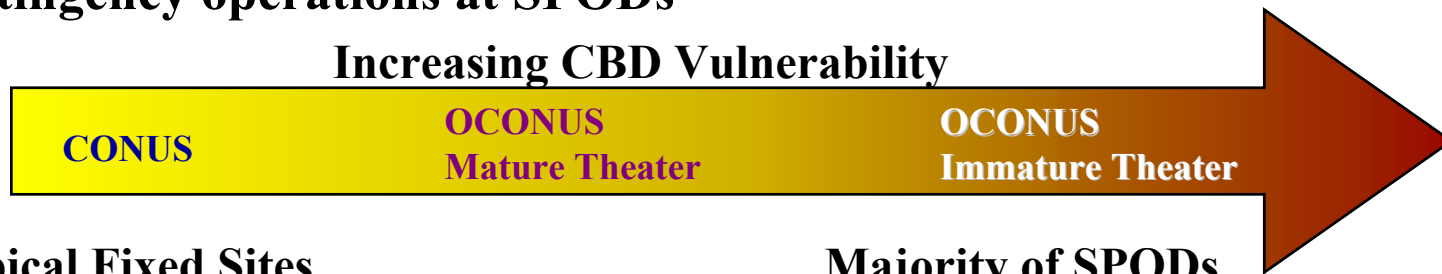
President Bush

West Point, New York

June 1, 2002

# ***SPOD CB Defense Challenge***

Minimize degradation to OPTEMPO & Force Flow resulting from CB attack during **vulnerable initial force deployment** period of contingency operations at SPODs



## Typical Fixed Sites

- Mature theater
- US controlled installation
- US Military Presence
- CBD Equipment in-place
- Robust C<sup>2</sup> Infrastructure
- Established CONOPS, TTPs
- Established Command Relationships

## Majority of SPODs

- Immature Theater
- Foreign owned / controlled facility
- No US Military Presence
- No CBD Equipment in-place
- No C<sup>2</sup> Infrastructure
- Ill-defined CONOPS, TTPs
- Ill-defined Command Relationships

Counter "Access Denial" Strategy, provide  
"Access Assurance" for Power  
Projection Operations

# *What is CASPOD?*

Chem / Bio Defense (CBD ) technologies and procedures for pre/during/post attack actions necessary to protect against and immediately react to the consequences of a Chemical, Biological, Toxic Industrial Chemical, or Toxic Industrial Material attack/release at Seaports of Debarkation.

## It will include:

- Protection for personnel and critical equipment prior to attack (including Host Nation assets)
- CB attack detection/identification/warning
- Contamination mapping
- Transportable CB Response Package (TCBRP)
- Decontamination of critical personnel and unique equipment/facilities necessary for port operations
- Deployable Networked system of sensors for improved situational awareness
- Limit CB effects on OPTEMP/O and degradation of Force Flow and provide a CB defense warfighting capability to the Combatant Commander



# ***CASPOD Objectives***

- **Demonstrate** operational concepts & tactics, techniques & procedures (TTPs) to initiate and sustain operations at SPODs
- **Identify** and refine force structure necessary to implement procedural and equipment requirements, which provide full-spectrum CB defense warfighting capability
- **Develop & Demonstrate** resident, pre-positioned, or rapidly transportable CBD materiel packages and force structure needed for employment at SPODs
- **Identify** strategic operational improvements / shortfalls for CASPOD contingencies
- **Provide** a forum, process and structure for addressing and modifying U.S., coalition, and host nation policy issues

**Mitigate effects of CB attack, Maintain power  
Projection, Sustain OPTEMPO & force flow at SPODs**



# *CASPOD Key Players*

- **Combatant Command Sponsor**
  - U.S. Central Command
- **Combatant Command Co-Sponsor**
  - U.S. Transportation Command
- **Supporting Combatant Command**
  - Pacific Command
- **Executing Agent**
  - DTRA CB
- **Operational Manger**
  - U.S. Central Command (LTC Simon, CCJ3-OC)
- **Technical Manager**
  - DTRA CB (Mr. Schiele, DTRA/CBD)
- **Lead Service**
  - U. S. Army
- **Technical Test Evaluator**
  - West Desert Test Center, Dugway Proving Grounds
- **Operational Test Evaluator**
  - AFOTEC/ATEC/CNA



**Blount Island, FL**



**MTMC Charleston, SC**

*Potential CONUS Demonstration Sites -*

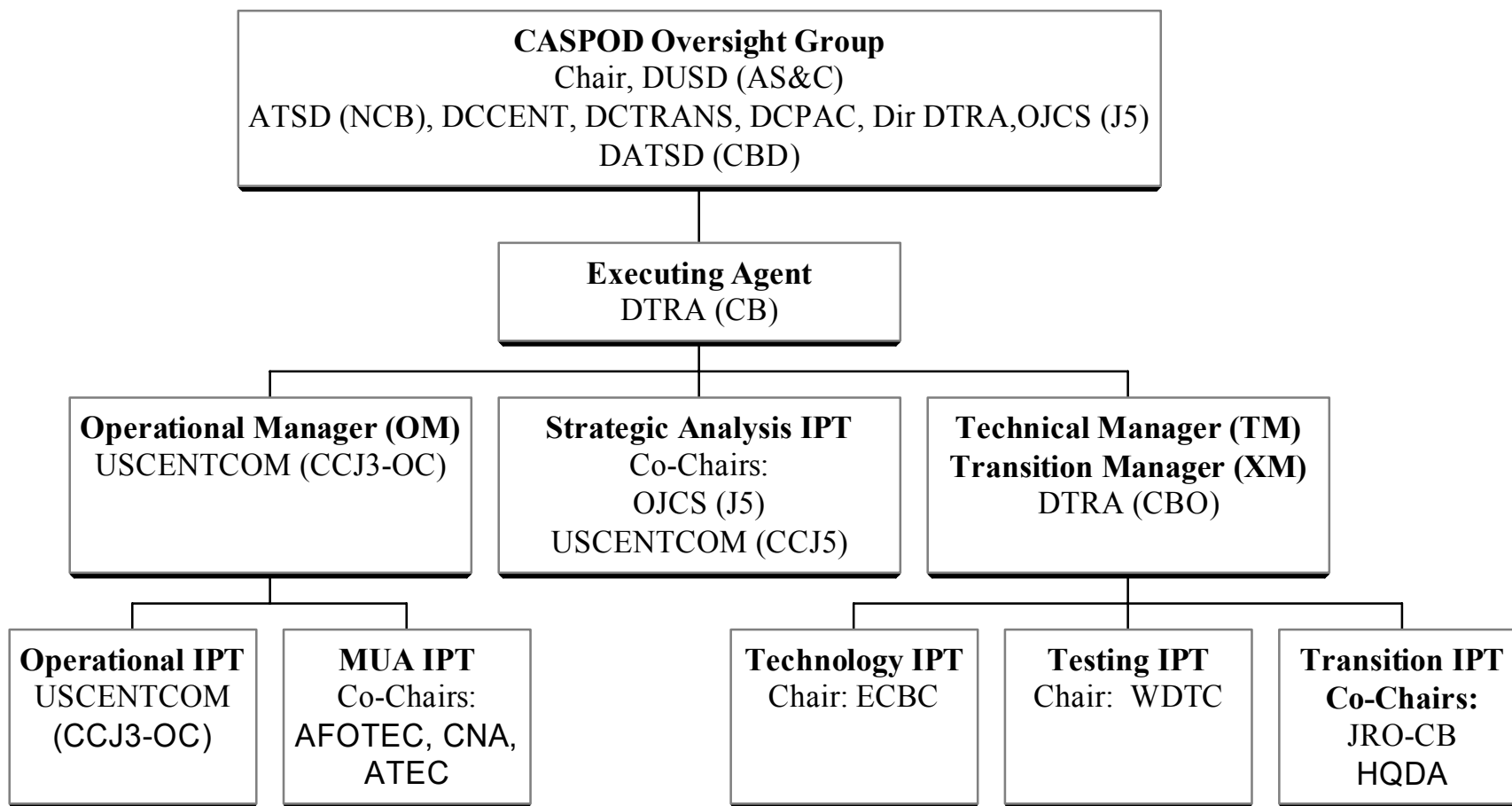


**Mina Salman, Bahrain**  
*- Potential OCONUS  
Demonstration Site -*



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# ***CASPOD ACTD Organizational Structure***



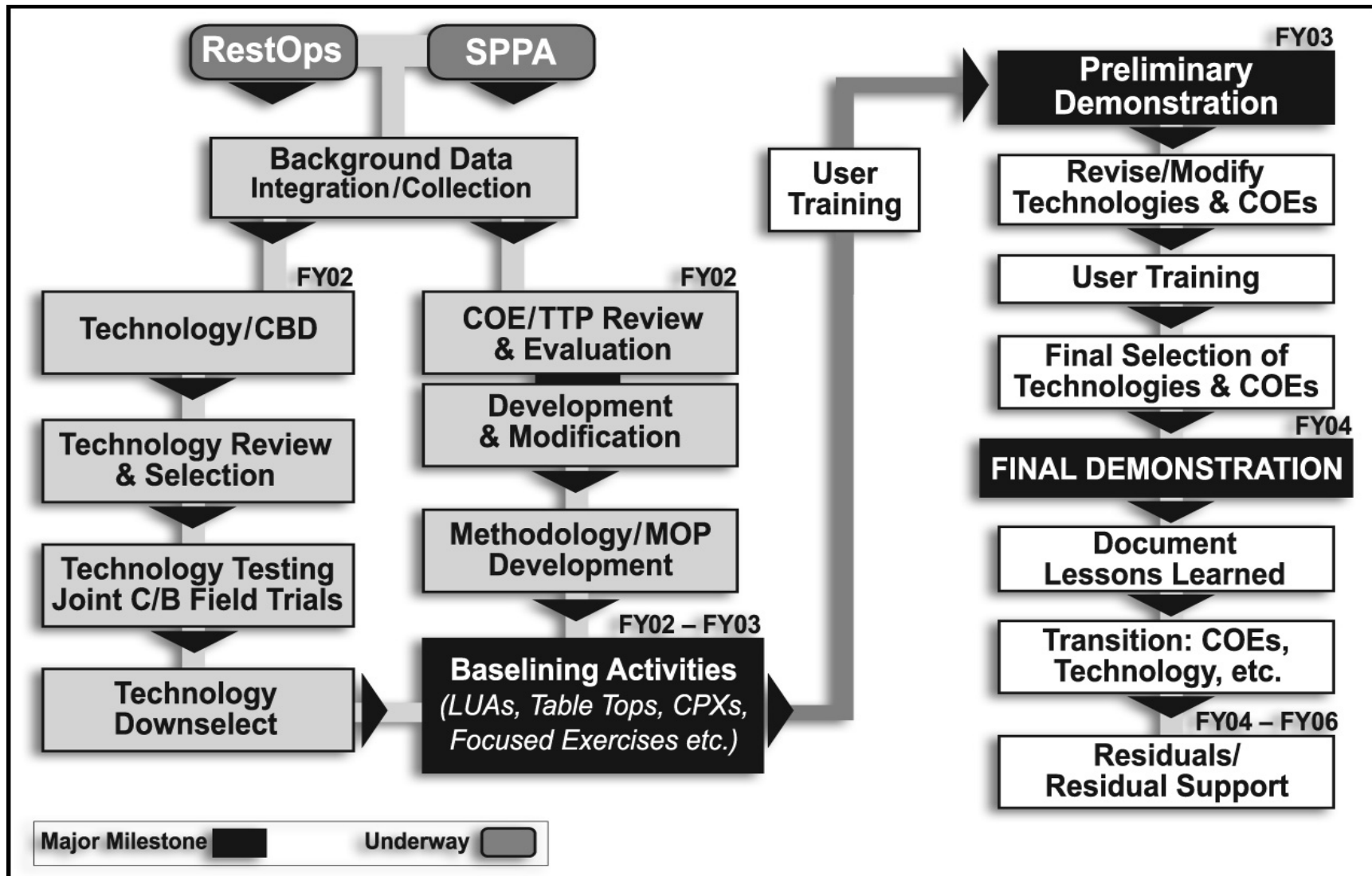
# ***CASPOD ACTD Funding Profile***

<b>\$Millions</b>	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>Total</b>
<b>DTRA (CBDP)</b>	5.5	9.5	13.4	3.0	3.0	34.4
<b>DUSD (AS&amp;C)</b>	1.8	1.8	3.0	1.0	1.0	8.6
<b>TOTAL</b>	<b>7.3</b>	<b>11.3</b>	<b>16.4</b>	<b>4.0</b>	<b>4.0</b>	<b>43.0</b>

**Fully Funded**  
**3 year Execution Phase**  
**2 year Residual Phase**



# CASPOD ACTD Process



# ***CASPOD ACTD Solutions***

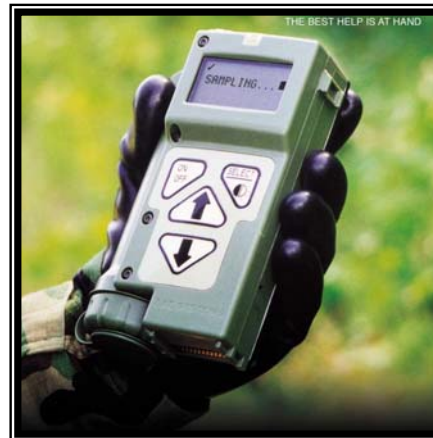
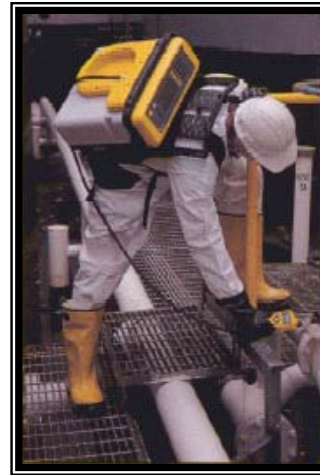
- **CB defense / Joint Doctrine, TTP changes**
- **Force structure and operational procedure changes**
- **Recommend improved joint / combined SPOD C2 structures**
- **Develop CBD scenario and training packages for Combatant Commander and Services SPOD exercises**
- **Recommend TPFDD and War Plan Revisions**
- **Recommend HN and SPOD Support Policy changes**
- **Identify operational procedures for employment of prepackaged CB SPOD defense capability**
- **Identify the CB defense warfighting capability requirement for the Combatant Commander**



# Potential CASPOD Solutions (Continued)

## Technology

- Identify mature CBD technologies
  - Detection, Decon, Protection, Medical
- Identify Information Technology Solutions
  - Sensor Integration, C<sup>2</sup> Situational Awareness tools
  - Combatant Commander CB Defense Planning and throughput analysis
  - M&S tools
- Develop training packages
- Construct prepackaged CB defense SPOD capability (Resident/Prepositioned/Fly Away)



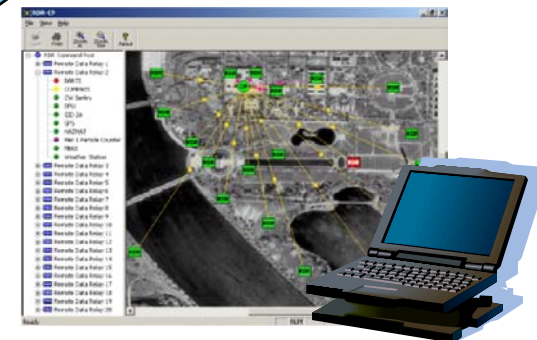
# Technology Focus Areas

## DETECTION



Networked Sensors  
with C2 / Situational  
Awareness Display

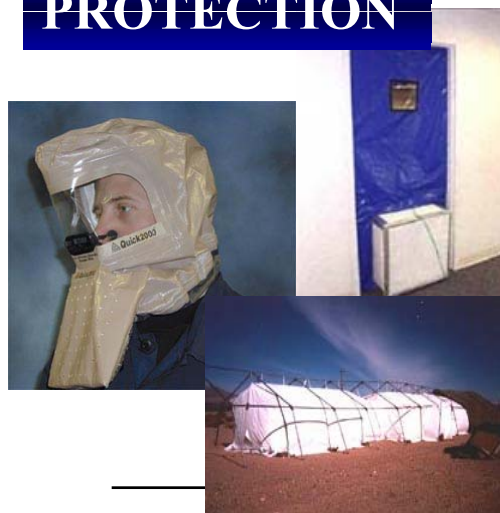
## SITUATIONAL AWARENESS



Resident, Pre-positioned,  
or rapidly Transportable  
CB Defense package

Deployable C2 System  
Leverage CRASOC2

## PROTECTION



## MEDICAL



## DECON




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# *Potential Residuals*

- Command & Control Situational Awareness for CBD
- Port Alerting Network
- CBD tactical sensors
- Unique barrier materials
- Personal protective equipment
- Medical equipment
- Decontaminants and hardware
- Operational Procedures to include Host Nation Support



Details  
Dependent On  
Combatant  
Command-  
Identified  
Location



# ***CASPOD Planning Drivers***

- **CASPOD Execution**
  - Mini-Technology Search and Field Trial
  - FY03 Preliminary Demo (CONUS port simulates SPOD)
  - FY04 Final Demo (OCONUS SPOD)
- **Employ Mature technologies**
  - No R&D
  - Minimum integration efforts
- **Leverage RestOps ACTD**
  - Literature Search
  - Technology Search and Testing
  - Airbase / APOD and Demonstration Lessons-learned
- **Leverage SPPA Project Efforts**
  - 4 SPOD assessments and detailed Port CBD Plans
  - Generic Port CBD Templates (Ammo, POL, General)
  - “Flyaway Package” Equipment List (Transportable Chem-Bio Response Package (TCBRP))

# *CASPOD Accomplishments to Date*

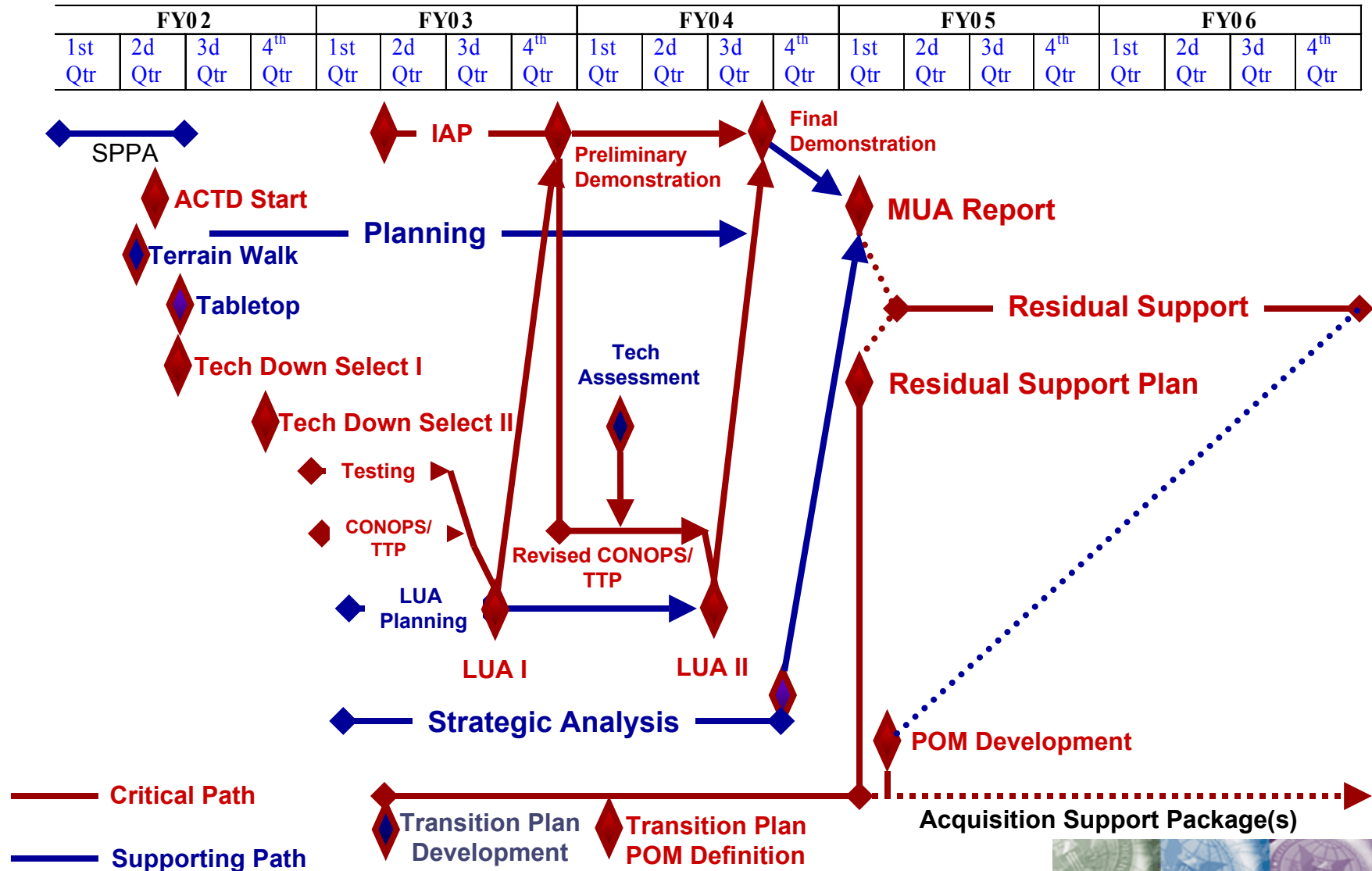
- Implementation Directive signed - 20 Feb 02
- Management Plan Coordination draft - Jan 02
- Final for Signature - 1ST Qtr FY03
- pending: JRO, PEO, HQDA
- SPPA Table Top Exercise Apr 02
- Phase I Technology Downselect Mar 02
- Phase II Downselect Jul 02
- Financial Execution Review 4<sup>th</sup> Qtr FY02

# *CASPOD Near-term Milestones*

- Management Plan Nov 02
- In-Progress/Financial Execution Review Oct 02 (Completed)
- Integrated Assessment Plan (IAP) 1<sup>st</sup> Qtr FY03
- Complete Technical Testing
  - Medical, Mortuary Affairs, Collective Protection Oct 02- Jan 03
  - Protection Equipment Oct 02- Jan 03
  - Detection Equipment Oct 02- Jan 03
  - Decontamination Equipment Oct 02- Jan 03
- Complete Initial Transition Plan 1<sup>st</sup> Qtr FY 03
- Preliminary Demonstration Planning 1<sup>st</sup> Qtr FY03 (ongoing)
- Limited Utility Assessment (LUA) Planning 1<sup>st</sup> & 2d Qtr FY03
  - Scenario Development
  - COE/CONOPS/TTP Development
  - Training/Manual Development
- LUA Execution 3d Qtr FY03
  - Exercise COE/CONOPS/TTP
  - Support Preliminary Demonstration Planning



# CASPOD Timeline



# *Questions?*

